



IMAGING AND DIAGNOSTIC TESTING

THE NUCLEAR CARDIOLOGY REPORT: PROBLEMS, PREDICTORS AND IMPROVEMENT

ACC Poster Contributions

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Background: Accreditation of nuclear cardiology (NC) labs is essential to insure high quality imaging and reporting. The quality of NC reports has never been systematically evaluated for compliance with the ICANL standards.

Methods: To determine standards compliance, site characteristics and the 18 elements of the ICANL NC reporting standard (continuous outcome variable) were evaluated in 1,301 labs applying for ICANL accreditation from 1/1/08 - 1/1/09. Characteristics examined include: accreditation decision and cycle, region, required by managed care, lab type, volume of NC studies divided into quartiles, and number of physicians/technicians. A series of analyses of variance was conducted followed by contrast tests.

Results: A majority of the labs were non-compliant (57.2%) with ≥ 1 of the 18 NC reporting elements ($M \pm SD = 2.13 \pm 2.58$). The top 4 non-compliant elements were: date of report (26.4%), separate reports (23.6%), route of administration (22.8%) and defect size/severity (19.8%). Differences of compliance with site characteristics are shown (Table). The number of MDs or technologists had no effect on non-compliance. Serial applications significantly increased compliance.

Characteristic	Non-compliant elements (mean \pm S.D.)	p value
Accreditation decision		p<.001
Grant	0 \pm .06	All comparisons, p<.001
Provisional	1.21 \pm 1.6	
Delay	3.06 \pm 2.7	
Accreditation cycle		p<.001
Initial	2.31 \pm 2.67	1st & 3rd p<.001
2nd	1.97 \pm 2.49	1st & 2nd p=NS
3rd	1.18 \pm 1.83	2nd & 3rd p=NS
Region of country		p<.001
Northeast (NE)	1.62 \pm 2.18	NE or MW vs. S or W
Midwest (MW)	1.69 \pm 2.14	
South (S)	2.44 \pm 2.76	
West (W)	3.30 \pm 3.16	p<.001
Managed Care		p<0.001
Required	1.78 \pm 2.2	p=.001
Not required	2.42 \pm 2.8	
Type of lab		
Private office	2.14 \pm 2.59	
Hospital	1.58 \pm 2.27	Mobile vs. each other type p<.01
Multi-specialty	2.25 \pm 2.45	
Mobile	4.21 \pm 3.44	
Volume of studies		p=.002
1st quartile (largest)	2.76 \pm 2.76	Quartile 1 vs. 3, p<.01; 1 vs. 4, p<.02 All others p=NS
2nd quartile	2.44 \pm 2.62	
3rd quartile	2.00 \pm 2.54	
4th quartile (smallest)	2.13 \pm 2.56	

Conclusion: NC reports have a high degree of non-compliance with the current standards. Labs in the south and west, mobile labs, and the largest volume labs had the greatest non-compliance. Feedback from prior applications significantly improves compliance with NC reporting standards on subsequent applications.